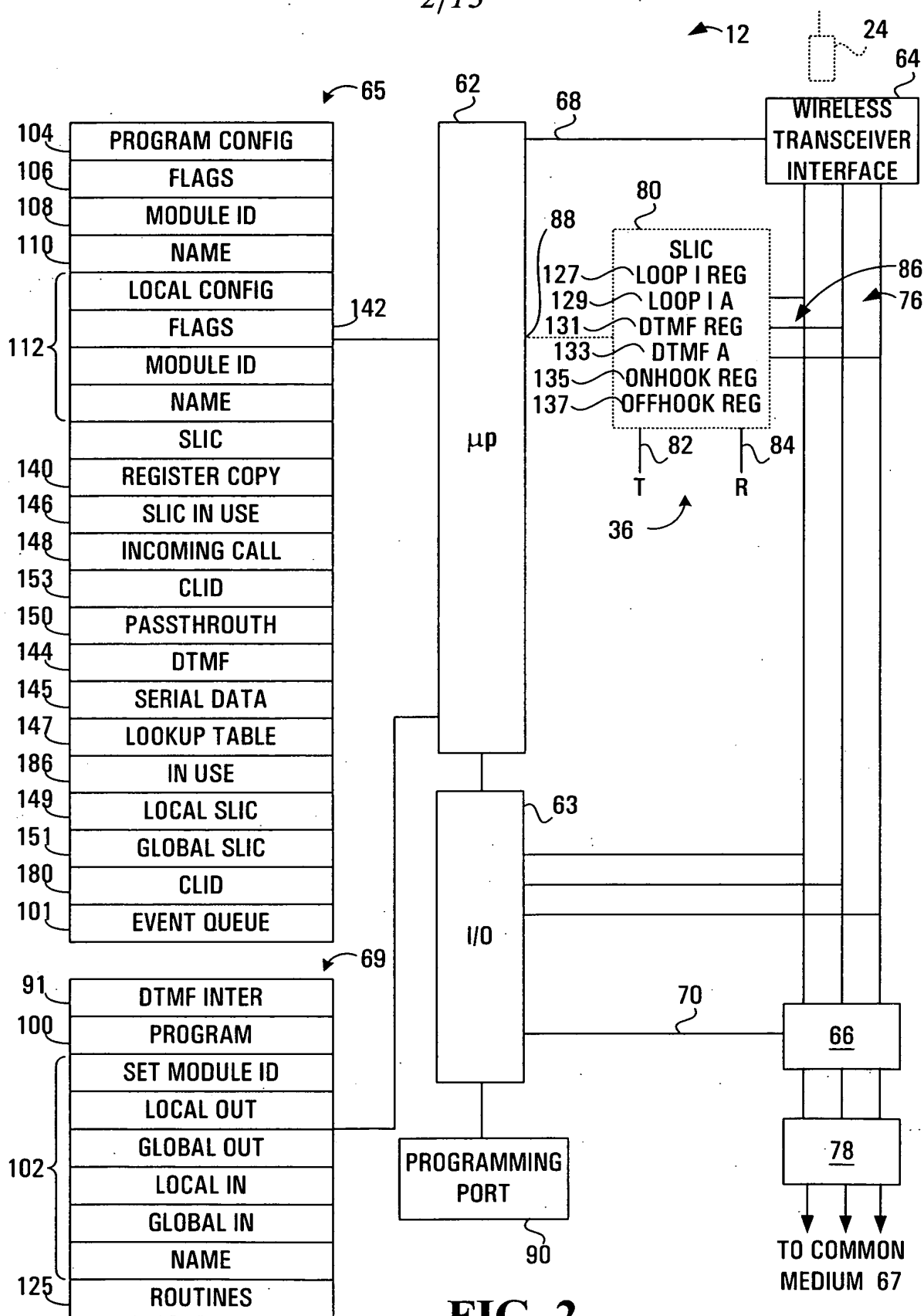
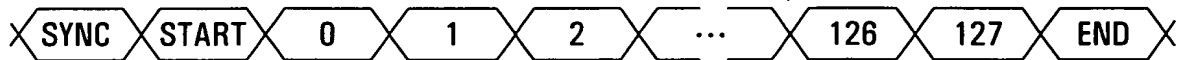


FIG. 1



**FIG. 3**

103

105

STIMULUS	STIMULUS
DETECT DTMF PROGRAM FROM SLIC 80 OR WIRELESS INTERFACE 64 (ex: *90)	SET PROGRAM MODE FLAG IN RAM 65
DETECT DIGITS '1 nnn' FROM SLIC 80 OR WIRELESS INTERFACE 64	SET MODULE ID = nnn IN RAM 65
DETECT DIGITS '2', '0' FROM SLIC 80 OR WIRELESS INTERFACE 64	SET LOCAL OUTGOING ACCESS FLAG IN RAM 65
DETECT DIGITS '2', '1' FROM SLIC 80 OR WIRELESS INTERFACE 64	SET GLOBAL OUTGOING ACCESS FLAG IN RAM 65
DETECT DIGITS '3', '0' FROM SLIC 80 OR WIRELESS INTERFACE 64	SET LOCAL INCOMING ACCESS FLAG IN RAM 65
DETECT DIGITS '3', '1' FROM SLIC 80 OR WIRELESS INTERFACE 64	SET GLOBAL INCOMING ACCESS FLAG IN RAM 65
DETECT DIGITS '4 nnn' FROM SLIC 80 OR WIRELESS INTERFACE 64	SET MODULE NAME = nnn IN RAM 65

FIG. 4

120

SOURCE (122)	DESTINATION (124)	COMMAND (126)	LENGTH (128)	DATA (130)	CHECKSUM (132)
-----------------	----------------------	------------------	-----------------	---------------	-------------------

FIG. 5

COMMAND SET: (CHANNEL 0 COMMANDS)

166 1.0 QUERY SLIC (166)

SRC	DEST	01	0	NULL	CHECKSUM
-----	------	----	---	------	----------

168 1.1 QUERY SLIC ACKNOWLEDGEMENT (168)

SRC	DEST	01	1	ACK/NACK	CHECKSUM
-----	------	----	---	----------	----------

160 2.0 QUERY CELL (160)

SRC	DEST	02	0	NULL	CHECKSUM
-----	------	----	---	------	----------

162 2.1 QUERY CELL ACKNOWLEDGEMENT (162)

SRC	DEST	02	1	ACK/NACK	CHECKSUM
-----	------	----	---	----------	----------

170 3.0 CONTROL SLIC (170)
REQUESTS CONTROL OF A PARTICULAR SLIC

SRC	DEST	03	0	NULL	CHECKSUM
-----	------	----	---	------	----------

172 3.1 CONTROL SLIC ACKNOWLEDGEMENT (172)
RESPONSE TO A CONTROL REQUEST TO INDICATE THAT CONTROL HAS BEEN ESTABLISHED

SRC	DEST	03	1	ACK/NACK	CHECKSUM
-----	------	----	---	----------	----------

164 4.0 CONTROL CELL (164)
REQUESTS CONTROL OF A PARTICULAR CELL

SRC	DEST	04	0	NULL	CHECKSUM
-----	------	----	---	------	----------

165 4.1 CONTROL CELL ACKNOWLEDGEMENT

SRC	DEST	04	1	ACK/NACK	CHECKSUM
-----	------	----	---	----------	----------

181 5.0 FREE SLIC ()
RELEASES CONTROL OF A PARTICULAR SLIC

SRC	DEST	05	0	NULL	CHECKSUM
-----	------	----	---	------	----------

5.1 FREE SLIC ACKNOWLEDGEMENT

SRC	DEST	05	1	ACK/NACK	CHECKSUM
-----	------	----	---	----------	----------

154 6.0 FREE CELL (154)
RELEASES CONTROL OF A PARTICULAR CELL

SRC	DEST	06	0	NULL	CHECKSUM
-----	------	----	---	------	----------

6.1 FREE CELL ACKNOWLEDGEMENT

SRC	DEST	06	1	ACK/NACK	CHECKSUM
-----	------	----	---	----------	----------

174 7.0 GEN RING (174)
COMMAND TO SLIC TO GENERATE RING TONE

SRC	DEST	07	N	RING DATA	CHECKSUM
-----	------	----	---	-----------	----------

176 7.1 GEN RING ACKNOWLEDGEMENT (176)

SRC	DEST	07	1	ACK/NACK	CHECKSUM
-----	------	----	---	----------	----------

FIG. 6A

8.0 GEN_TONE**COMMAND TO SLIC TO GENERATE A PARTICULAR TONE (CAS, SAS, CP, ETC)**

SRC	DEST	08	N	TONE DATA	CHECKSUM
-----	------	----	---	-----------	----------

8.1 GEN_TONE ACKNOWLEDGEMENT

SRC	DEST	08	1	ACK/NACK	CHECKSUM
-----	------	----	---	----------	----------

9.0 SEND_FSK (182)**182 COMMAND TO SLIC TO TRANSFER FSK DATA (CALLER ID, MESSAGE WAITING, ADSI ETC)**

SRC	DEST	09	N	CLID DATA	CHECKSUM
-----	------	----	---	-----------	----------

9.1 SEND_CLID ACKNOWLEDGEMENT

SRC	DEST	09	1	ACK/NACK	CHECKSUM
-----	------	----	---	----------	----------

10.0 CONNECTAUDIO_SLIC (184)**184 COMMAND TO SLIC TO CONNECT AUDIO TO A PARTICULAR PCM CHANNEL**

SRC	DEST	0A	1	CHANNEL	CHECKSUM
-----	------	----	---	---------	----------

10.1 CONNECTAUDIO_SLIC ACKNOWLEDGEMENT

SRC	DEST	0A	1	ACK/NACK	CHECKSUM
-----	------	----	---	----------	----------

11.0 CONNECTAUDIO_CELL**COMMAND TO CELL TO CONNECT AUDIO TO A PARTICULAR PCM CHANNEL**

SRC	DEST	0B	0	CHANNEL	CHECKSUM
-----	------	----	---	---------	----------

11.1 CONNECTAUDIO_CELL ACKNOWLEDGEMENT

SRC	DEST	0B	1	ACK/NACK	CHECKSUM
-----	------	----	---	----------	----------

12.0 DISCONNECTAUDIO_SLIC**COMMAND TO SLIC TO DISCONNECT AUDIO PATH**

SRC	DEST	0C	1	CHANNEL	CHECKSUM
-----	------	----	---	---------	----------

12.1 DISCONNECTAUDIO_SLIC ACKNOWLEDGEMENT

SRC	DEST	0C	1	ACK/NACK	CHECKSUM
-----	------	----	---	----------	----------

13.0 DISCONNECTAUDIO_CELL (152)**152 COMMAND TO CELL TO DISCONNECT AUDIO PATH**

SRC	DEST	0D	0	NULL	CHECKSUM
-----	------	----	---	------	----------

13.1 DISCONNECTAUDIO_CELL ACKNOWLEDGEMENT

SRC	DEST	0D	1	ACK/NACK	CHECKSUM
-----	------	----	---	----------	----------

FIG. 6B

14.0 SLIC_LINESTATUS

157 MESSAGE GENERATED BY SLIC TO INDICATE LINE STATUS (ON-HOOK OR OFF-HOOK)

SRC	DEST	OE	0	NULL	CHECKSUM
-----	------	----	---	------	----------

14.1 SLIC_LINESTATUS ACKNOWLEDGEMENT

SRC	DEST	OE	1	ACK/NACK	CHECKSUM
-----	------	----	---	----------	----------

15.0 SLIC_DIGITSDIALED (156)

156 MESSAGE GENERATED BY SLIC TO INDICATE THAT DIGITS HAVE BEEN DETECTED AT THE ANALOG INTERFACE

SRC	DEST	OF	1	DIGIT	CHECKSUM
-----	------	----	---	-------	----------

15.1 SLIC_DIGITSDIALED ACKNOWLEDGEMENT

SRC	DEST	OF	1	ACK/NACK	CHECKSUM
-----	------	----	---	----------	----------

16.0 KEYPRESS_CELL (158)

158 COMMAND TO CELL TELLING IT TO SIMULATE KEY PRESSES

SRC	DEST	10	1	KEY DATA	CHECKSUM
-----	------	----	---	----------	----------

16.1 KEYPRESS_CELL ACKNOWLEDGEMENT

SRC	DEST	10	1	ACK/NACK	CHECKSUM
-----	------	----	---	----------	----------

17.0 CELL_DIGITSDIALED

MESSAGE GENERATED BY CELL TO INDICATE THAT DIGITS HAVE BEEN DETECTED AT THE CELL

SRC	DEST	11	1	DIGIT	CHECKSUM
-----	------	----	---	-------	----------

17.1 CELL_DIGITSDIALED ACKNOWLEDGEMENT

SRC	DEST	11	1	ACK/NACK	CHECKSUM
-----	------	----	---	----------	----------

18.0 CELL_CALLPROGRESS

MESSAGE GENERATED BY CELL TO INDICATE CALL PROGRESS TONES (SAS, CAS, BUSY, OVERFLOW ETC)

SRC	DEST	12	1	KEY DATA	CHECKSUM
-----	------	----	---	----------	----------

18.1 CELL_CALLPROGRESS ACKNOWLEDGEMENT

SRC	DEST	12	1	ACK/NACK	CHECKSUM
-----	------	----	---	----------	----------

19.0 GLOBAL_QUERY_FREE_CELL

COMMAND SENT GLOBALLY TO FIND THE EXISTENCE OF A FREE CELL

SRC	0 (GLOBAL)	13	0	NULL	CHECKSUM
-----	------------	----	---	------	----------

19.1 GLOBAL_QUERY_FREE_CELL ACKNOWLEDGEMENT

RETURNS THE IDENTIFICATION OF A FREE CELL

SRC	DEST	13	1	ACK/NACK	CHECKSUM
-----	------	----	---	----------	----------

20.0 GLOBAL_QUERY_MODULE_EXIST

SRC	0 (GLOBAL)	14	0	NULL	CHECKSUM
-----	------------	----	---	------	----------

20.1 GLOBAL_QUERY_MODULE_EXIST ACKNOWLEDGEMENT

SRC	DEST	14	1	ACK/NACK	CHECKSUM
-----	------	----	---	----------	----------

FIG. 6C

EVENT ID	STIMULUS	RESPONSE
EVENT ID	STIMULUS	POLL SLIC, READ REGISTERS, COPY REGISTERS INTO RAM 65. CHECK FLAGS AGAINST LOOKUP TABLE FOR INTERRUPT SOURCE. ON-HOOK: GENERATE SLIC ON-HOOK EVENT. OFF-HOOK: GENERATE SLIC OFF-HOOK EVENT. CHECK PROGRAMMING TABLES IN RAM 65 AND SET LOCAL_CELL OR GLOBAL_CELL VOICE ROUTING FLAG. DTMF: GENERATE SLIC DTMF EVENT. STORE DIGIT IN RAM 65
511	SLIC OFF-HOOK EVENT	SET SLIC IN USE FLAG IN RAM 65. IF INCOMING CALL FLAG: GENERATE CONNECT AUDIO MESSAGE TO SLIC 80. SEND "ANSWER" CELL PHONE KEY TO WIRELESS INTERFACE 64. IF NOT INCOMING CALL FLAG: CHECK RAM 65 VOICE ROUTING FLAGS AND GENERATE LOCAL_CELL OR GLOBAL_CELL EVENT.
512	SLIC ON-HOOK EVENT	GENERATE DISCONNECT AUDIO MESSAGE TO SLIC 80. IF PASS THROUGH SEND DISCONNECT AUDIO_CELL PCM MSG AND FREE_CELL PCM MSG TO COMMON MEDIUM INTERFACE 66 ELSE SEND "END" KEY TO WIRELESS INTERFACE 64. RESET SLIC IN USE FLAG IN RAM 65.
513	SLIC DTMF EVENT	IF NO AUDIO CONNECTION CHECK FOR PROGRAMMING CODES AND IF NO AUDIO CONNECTION: RESET DIGIT TIMEOUT TIMER. IF PASS THROUGH GENERATE DIGITSDIALED_SLIC PCM MESSAGE WITH DTMF DATA ELSE SEND KEY PRESS MESSAGE TO WIRELESS INTERFACE 64 WITH DTMF DATA STORED IN RAM 65.
514	DIGIT TIMEOUT EVENT	SEND CONNECT AUDIO MSG TO SLIC 80. IF PASS THROUGH FLAG IS SET IN RAM 65 GENERATE "SEND" KEY TO REMOTE CELL VIA PCM SEND KEY COMMAND, ELSE GENERATE "SEND" KEY TO WIRELESS INTERFACE 64.
515	LOCAL_CELL EVENT	SENT TONE ON MESSAGE TO SLIC 80 WITH DIAL TONE DATA.
516	GLOBAL_CELL EVENT	GENERATE PCM COMMAND TO QUERY FOR AN AVAILABLE WIRELESS INTERFACE, IF ACK, STORE SOURCE FIELD IN RAM 65 AND GENERATE CONTROL CELL PCM MESSAGE. IF ACK GENERATE CONNECT EVENT. IF NACK FOR EITHER MSG, GENERATE CONNECT FAIL EVENT.

FIG. 7A

520	CELL INTERRUPT	READ SERIAL DATA, COPY INTO RAM 65. CHECK AGAINST LOOKUP TABLE TO DETERMINE SOURCE: RINGING: GENERATE CELL INCOMING CALL EVENT. SET CELL IN USE FLAG. CHECK PROGRAMMING TABLES IN RAM 65 AND SET LOCAL SLIC OR GLOBAL SLIC VOICE ROUTING FLAG. CLID: GENERATE CELL CLID DATA EVENT. CALL CONTROL: GENERATE CELL CALL CONTROL EVENT (CALL PROGRESS TONES, CALLER ID, FAR END DISCONNECT ETC.)
521	CELL INCOMING CALL EVENT	IF LOCAL SLIC FLAG IS SET IN RAM 65: IF SLIC IN USE FLAG IS NOT SET, GENERATE RING ON MSG TO SLIC 80. SET INCOMING CALL FLAG IN RAM 65. IF SLIC IN USE FLAG IS SET, RETURN A SLIC BUSY MESSAGE TO WIRELESS INTERFACE 64. IF GLOBAL SLIC FLAG IS SET IN RAM 65: SEND PCM QUERY SLIC MESSAGE TO COMMON MEDIUM INTERFACE 66. IF ACK THEN SEND PCM CONTROL SLIC. IF ACK THEN SEND PCM GEN_RING MSG. IF NACK TO ANY THEN SEND BUSY MSG TO WIRELESS INTERFACE 64.
522	CELL CLID DATA EVENT	STORE CLID DATA IN RAM 65. IF GLOBAL SLIC FLAG IS SET IN RAM 65: SEND PCM SEND_CLID MSG TO COMMON MEDIUM INTERFACE 66 TO TRANSMIT CLID DATA STORED IN RAM 65. IF LOCAL SLIC FLAG IS SET: SEND SERIES OF TONE ON-OFF COMMANDS TO SLIC TO TRANSMIT CLID DATA STORED IN RAM 65 TO SLIC 80 IN FSK FORMAT (SERIES OF 1200/2200 Hz TONES AT 1200 BITS/SECOND)
523	CELL CALL CONTROL EVENT WITH DATA	IF CELL ON HOOK MSG, GENERATE DISCONNECT AUDIO MSG TO SLIC 80. IF OTHER CALL CONTROL EVENTS (CALL PROGRESS TONES ETC) GENERATE APPROPRIATE TONE ON COMMANDS TO SLIC 80 FOR ANALOG EQUIVALENT TONE (BUSY, OVERFLOW, CAS, ETC)
524	CONNECT EVENT	SET PASS THROUGH FLAG IN RAM 65. SEND TONE ON MESSAGE TO SLIC 80 WITH DIAL TONE DATA.
525	CONNECT FAIL EVENT	SEND TONE ON MSG WITH RECALL TONE DATA TO SLIC 80

FIG. 7B

530	PCM CELL CALL CONTROL EVENT WITH DATA	IF PASS THROUGH FLAG IS SET IN RAM 65: IF PCM CELL ON HOOK MSG, GENERATE DISCONNECT AUDIO MSG TO SLIC 80. IF OTHER CALL CONTROL EVENTS (CALL PROGRESS TONES ETC) GENERATE APPROPRIATE TONE ON COMMANDS TO SLIC 80 FOR ANALOG EQUIVALENT TONE (BUSY, OVERFLOW, CAS, ETC)
531	PCM SLIC CALL CONTROL EVENTS WITH DATA	IF PASS THROUGH FLAG IS SET IN RAM 65: IF PCM SLIC ON HOOK MSG, GENERATE SEND "END" KEY TO WIRELESS INTERFACE 64. IF OTHER CALL-CONTROL EVENTS, GENERATE APPROPRIATE COMMANDS TO WIRELESS INTERFACE 64 FOR CELLULAR EQUIVALENT MESSAGE.
532	PCM LINE STATUS SLIC	IF OFF-HOOK SEND PCM CONNECT AUDIO SLIC MSG TO COMMON MEDIUM INTERFACE 66. SET PASS THROUGH FLAG IN RAM 65
533	PCM QUERY SLIC MSG	SEND PCM QUERY SLIC ACK/NACK DEPENDING ON STATE OF SLIC IN _USE FLAG IN RAM 65
534	PCM MSGS	ALL PCM MESSAGES LISTED IN PCM SECTION ARE ACCEPTED BY THE MICROPROCESSOR AND CONVERTED TO CELL OR SLIC EQUIVALENTS.

FIG. 7C

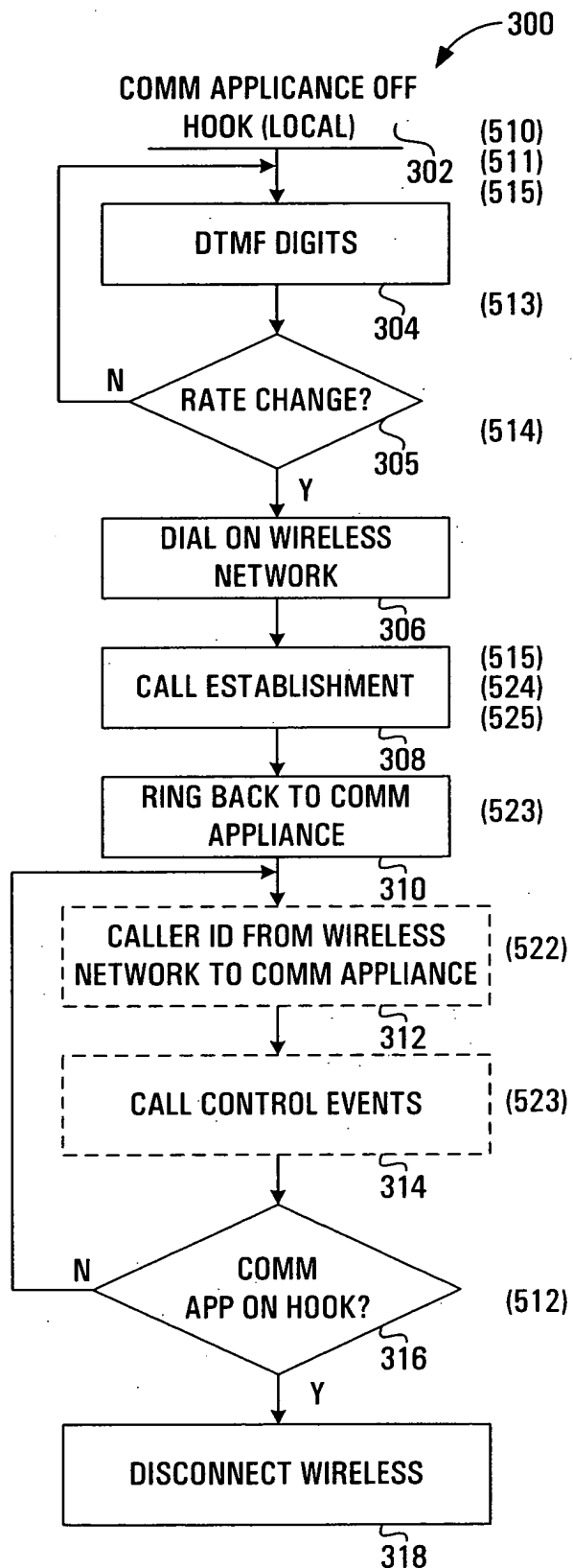


FIG. 8

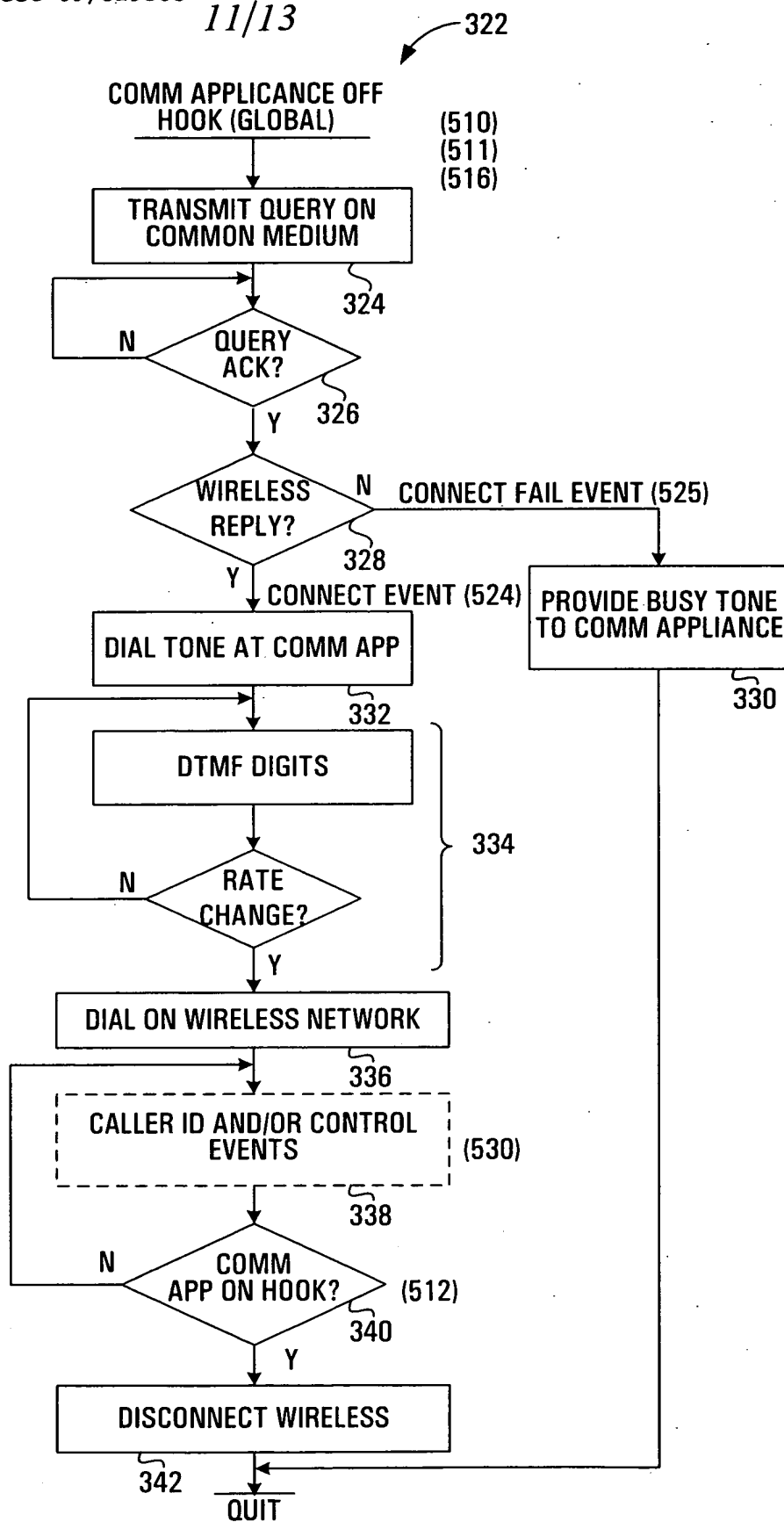


FIG. 9

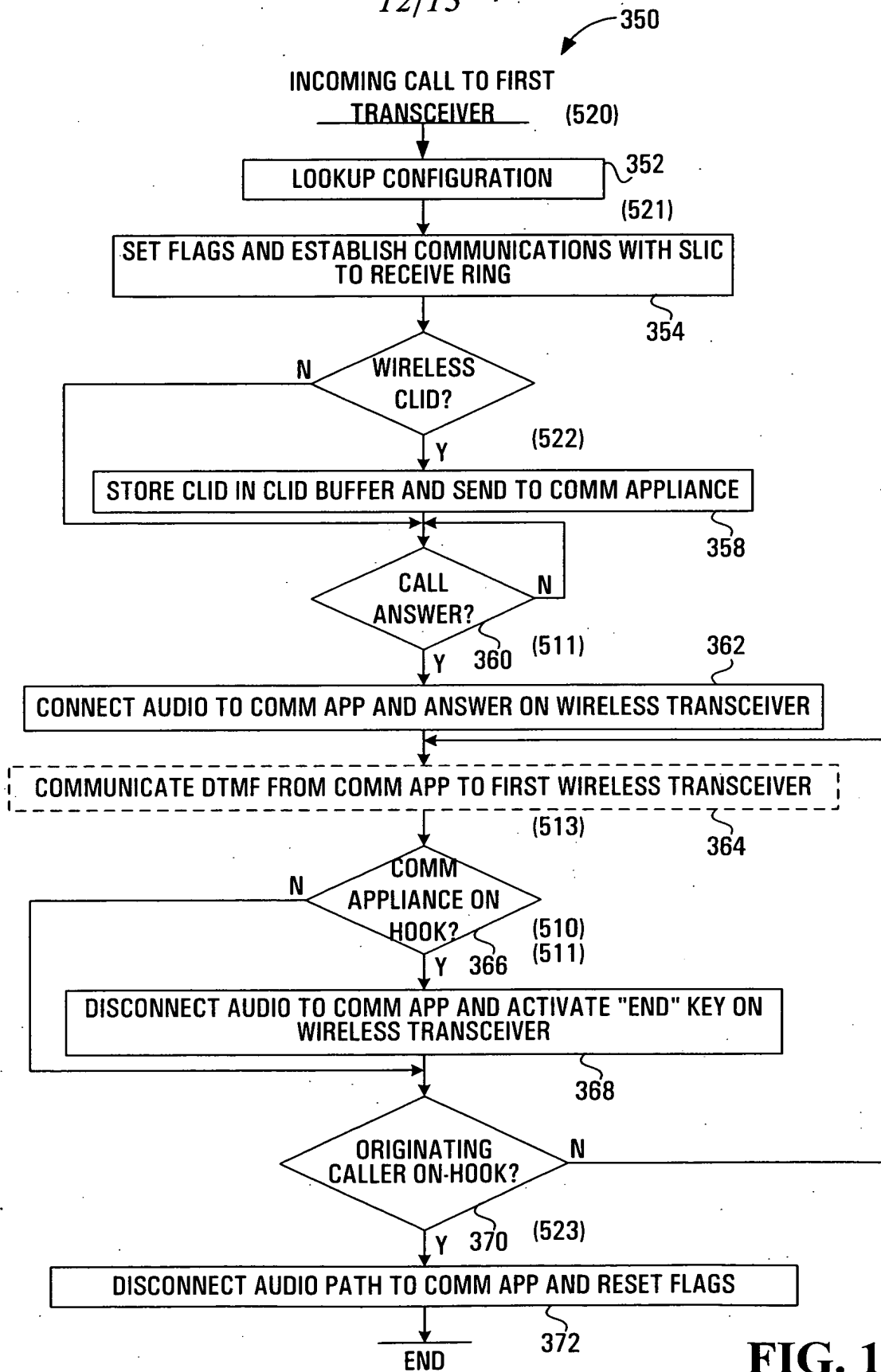


FIG. 10

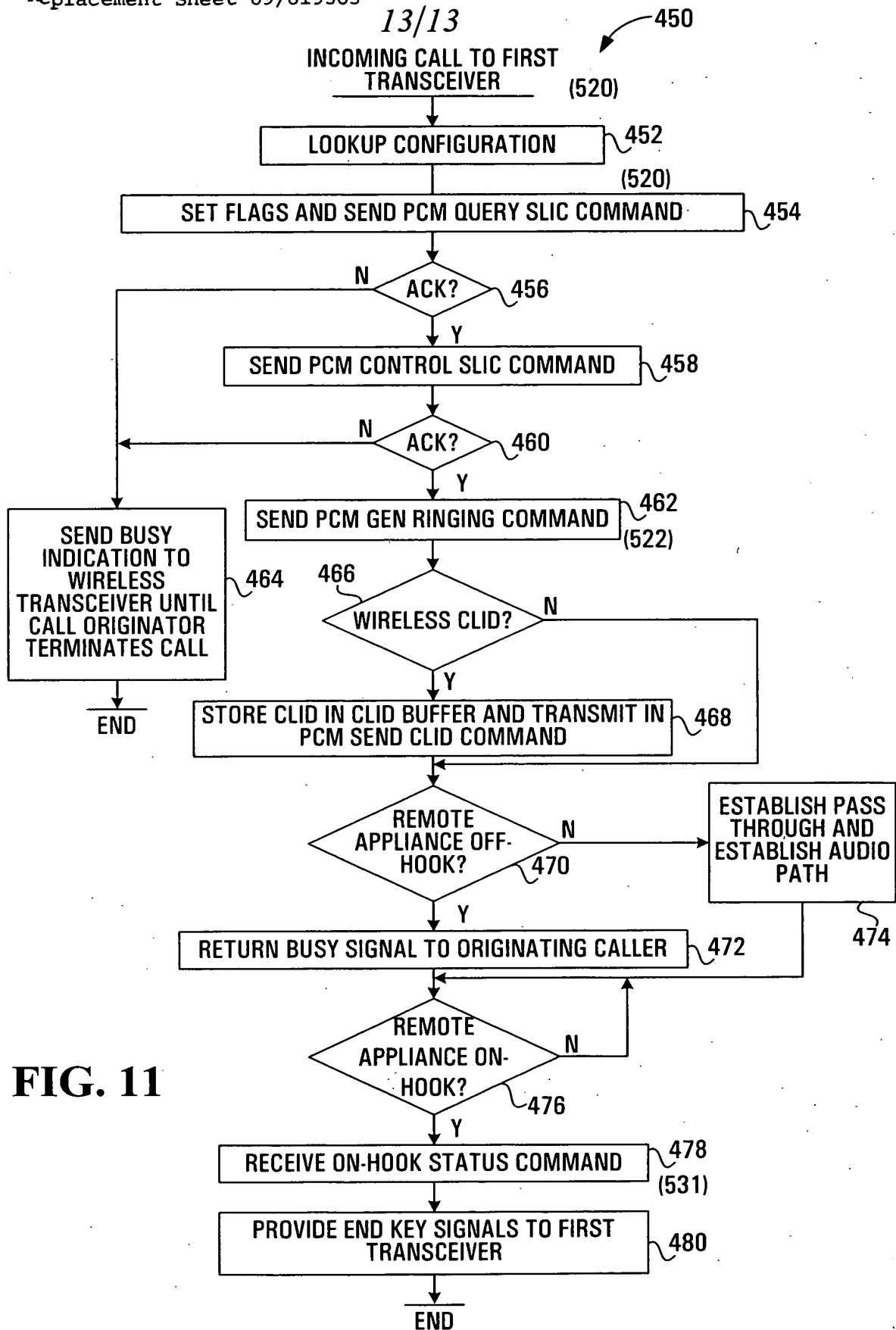


FIG. 11